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New patent claims 1 to 13

1. A stabilizer combination for halogen-containing thermoplastic resins, encompassing:

a) calcium oxide and/or calcium hydroxide, where these, where appropriate, may have been surface-modified, and have a particle size of not more than 200 μm ;

b) at least one tin compound of the general formula (I)



where

n is 1 or 2;

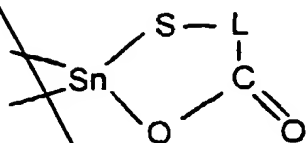
each of the groups R, which may be identical or different, is a straight-chain or branched alkyl group having from 1 to 22 carbon atoms;

each of the groups X, which may be identical or different, is -S- or -O-; and

each of the groups R', which may be identical or different, is a straight-chain or branched alkyl group having from 1 to 22 carbon atoms, or a $-\text{[C(O)]}_m\text{-L-C(O)-O-R''}$ group or a $-\text{[C(O)]}_m\text{-L-O-C(O)-R''}$ group, where m is 0 or 1, -L- is a divalent connecting group which is selected from alkylene groups having from 1 to 4 carbon atoms, or a vinylene group, and R'' is an alkyl group having from 1 to 22 carbon atoms; or

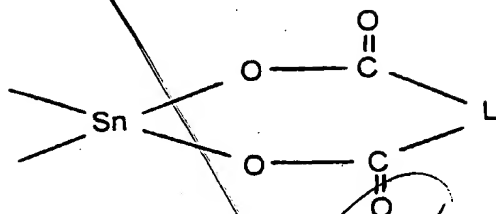
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two (X-R') groups may have bonding to one another to form a heterocyclic ring of the formula (I') or (I'')



(I')

or



(I'')

where L is as defined above; and

c) at least one zinc compound selected from liquid and solid zinc salts of saturated, unsaturated, straight-chain, or branched mono- or polyfunctional aromatic or aliphatic carboxylic acids, zinc oxide and zinc hydroxide;

with the proviso that no perchlorate is present in the stabilizer combination.

2. A stabilizer combination as claimed in claim 1, wherein the amount of component (a) present is from 0.1 to 5 parts by weight.

3. A stabilizer combination as claimed in either of claims 1 and 2, wherein component (b) is at least one tin compound of the formula (I), where R is an alkyl group having from 1 to 8 carbon atoms.

4. A stabilizer combination as claimed in any of claims 1 to 3, characterized in that component (b) is at least

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one tin compound of the formula (I), where R' is an alkyl group having from 8 to 18 carbon atoms, or a $-\text{C}(\text{O})_m-\text{L}-\text{C}(\text{O})-\text{O}-\text{R}''$ group or a $-\text{C}(\text{O})_m-\text{L}-\text{O}-\text{C}(\text{O})-\text{R}''$ group, where -L- is a methylene, ethylene, or vinylene group, and R'' is an alkyl group having from 6 to 12 carbon atoms.

5. A stabilizer combination as claimed in any of claims 1 to 3, characterized in that component (b) is at least one tin compound of the formula (I), where two (X-R') groups have bonding to one another to form a heterocyclic ring of the formula (I') or (I''), where -L- is an ethylene group or a vinylene group.

6. A stabilizer combination according to any of claims 1 to 5, characterized in that the amount of component (b) present is from 0.1 - 3 parts by weight.

7. A stabilizer combination according to any of claims 1 to 6, characterized in that component (c) is a zinc salt of a saturated aliphatic carboxylic acid having from 10 to 18 carbon atoms.

8. A stabilizer combination as claimed in any of claims 1 to 7, characterized in that the amount of component (c) present is from 0.1 to 3 parts by weight.

9. A thermoplastic resin composition, comprising at least one halogen-containing thermoplastic resin and a stabilizer combination according to any of claims 1 to 8.

10. A thermoplastic resin composition according to claim 9, characterized in that the halogen-containing thermoplastic resin is polyvinyl chloride.

11. The use of the stabilizer combination according to any of claims 1 to 8 for stabilizing halogen-containing thermoplastic resins.

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